

Metric Measurement

Quantity Being Measured	Definition	SI Unit Used	Abbreviation
Mass	Measure of the amount of matter in an object	gram (most common unit)	g
Length	Distance between two points	meter	m
Amount of Substance	Expression of the number of particles in a sample	mole	mol
Temperature	Measure of heat flow between objects	Kelvin (used in chem as the SI base unit) Celsius (more common unit)	K °C
Volume	Amount of space occupied by an object $V = \text{length} \times \text{width} \times \text{height}$	liter (used for volume of liquids) cubic meter (used for volume of solids)	L m^3
Time	Measure of distance between events	second	s
Density	Ratio that compares the mass of an object to its volume $D = M/V$	Any unit of mass divided by any unit of volume	Most common: g/mL or g/cm^3
Electric Current	Flow of electric charge	ampere	A
Luminous Intensity	Brightness of light emitted from a source	candela	cd
Energy	Capacity to do work or transfer heat	Joules	J
Pressure	Force exerted per unit area	Pascals	Pa